## UNDERGRADUATES PURSUING RESEARCH IN SCIENCE AND ENGINEERING (UPRISE)

## DEPARTMENT OF BIOMEDICAL ENGINEERING COLLEGE OF ENGINEERING AND APPLIED SCIENCE

## SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 02/25/2022

PROJECT TITLE: Ultrasound imaging for therapy guidance

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## Project Description

The Biomedical Acoustics Laboratory does research on ultrasound imaging for guiding therapy, which includes cancer treatment by heating and radiation, correction of irregular heart rhythms, speech therapy, and rehabilitation of swallowing disorders. Potential projects involve analysis of ultrasound signal and image data, performing imaging and therapy experiments, and programming in MATLAB, in collaboration with a team of faculty, postdoctoral trainees, and graduate and undergraduate students.